The Behavior of Students in the Economics Class at CamEd Business School

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ABSTRACT

This study aimed to investigate the behavior of the students in the economics class, such as reading, the preparation of the students before and after each session. A quantitative research was employed in this study to collect the data from 250 students who studied Microeconomics and are currently studying Macroeconomics. The study found that the reading habit of the respondents have changed after studying at CamEd, but the total reading hours is still rather low. The macroeconomics textbook which is currently used in macroeconomics class was rather difficult in matching the competency of the respondents since the level of understanding in Mathematics of most of the respondents is average. The correlation between level of understanding of Mathematics of the respondents and the level of understanding of Macroeconomics subject was found in this study with 1 percent significant level.

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1. Introduction

Studying at CamEd Business School (CamEd) is challenging. Each student works very hard to pass each course, not only the courses of ACCA but also the fundamental economics subjects such as Microeconomics and Macroeconomics. At CamEd, Microeconomics class focuses on the behavior of economic agents, particularly consumer behavior and producer behavior, market condition (competitive, oligopoly, monopoly, monopolistic competition and monopsony markets) which does not require advanced mathematical background. Upon taking Microeconomics class, students also need to take Macroeconomics class (Author, 2016) which concentrates on the studies of the aggregate economics activities: macroeconomics indicators, IS-LM models and the macroeconomic policies; fiscal and monetary policies, which require good mathematic skills.

This research is conducted to investigate the behavior of CamEd students in the economics class. The author look to understand the following matter including students' reading habit, the level of their understanding of each course, how well the students prepare before and after the class. Furthermore, the following hypotheses are tested in the study.

1. There is no relationship between "what your level of understanding of Macroeconomics subject is" and "what the level of mathematics used in the Macroeconomics subject is".
2. There is no relationship between "how difficult the Macroeconomics textbook written by Bernanke, Abel, and Croushore, Macroeconomics, seven edition, Addison-Wesley, 2011, is" and "what level of exercises at the end of each chapter of Macroeconomics can be completed by yourself without any solution or help from your lecturer".
3. There is no relationship between "what levels of difficulties you think that your Macroeconomics course book matches your competency in studying that subject? and "what level of mathematics is used in the Macroeconomics subject that you are studying".
4. There is no relationship between "what your level of understanding of Mathematics is" and "what your level of understanding of Macroeconomics subject is"

2. Methodology

2.1. Research Designs

This research uses mainly primary data which is collected from CamEd's students who have already studied Microeconomics and are currently studying Macroeconomics subject at CamEd Business School. The study consists of both explanatory data collection and analysis and hypothesis testing (Bordens & Abbott, 2011). The data collecting process is explained as follows. A questionnaire is developed and comprises twenty three closed-ended questions and the targeted respondents are students with the criteria mentioned above. The questionnaire is developed to collect as such information from the students: demography, reading habit before and after studying at CamEd, level of self-dependence in study, level of understanding economic subjects as well as economic textbooks, level of preparation of the student before and after each session of each economic class.

2.2. Data Collection and Analysis

The sample size of this research is 250 students from 6 Macroeconomic classes at CamEd. The developed questionnaire is randomly distributed to 30 students among the 6 groups in order to learn about the level of understanding of the respondents in answering the questionnaire. This process is conducted before the official distribution of the questionnaire to all students to make sure that the developed questionnaire is well understood by the target respondents. If any problems are found during testing of the questionnaire, the appropriate adjustments are applied. The best time in collecting the data from the students is during each class time (Falk & Blumenreich, 2005). The next step of the data collecting, after the questionnaire has already been finalized, is the distribution of the questionnaire to the students in each class in order to complete the data collection process.

To check the validity of research instrument as well as data collection, the Cronbach's Alpha (Cronbach, 1951) is employed. The research instrument is valid if the value of the Alpha is seven or more than seven. If the value of the Alpha is less than seven, some questions will be eliminated from the questionnaire to improve the value of the Alpha. Thereafter, descriptive statistic is generated and non-parametric test is also employed to test the following hypotheses:

1. There is no relationship between "what your level of understanding of Macroeconomics subject is" and "what the level of mathematics used in the Macroeconomics subject is"
2. There is no relationship between "how difficult the Macroeconomics textbook written by Bernanke, Abel, and Croushore, Macroeconomics, seven edition, Addison-Wesley, 2011, is" and "what level of exercises at the end of each chapter of Macroeconomics can be completed by yourself without any solution or help from your lecturer?"
3. There is no relationship between "what level of difficulties you think that your Macroeconomics coursebook matches your competency in studying that subject" and "what level of mathematics is used in the Macroeconomics subject"

4. There is no relationship between "what your level of understanding of Mathematics is" and "what your level of understanding of Macroeconomics subject which you are studying is".

3. Findings

To measure scale of reliability of research instrument, Cronbach's Alpha is employed, as indicated in Table 1; the value of the Cronbach's Alpha is 0.715 which is more than 0.7 which can be concluded that the research instrument is reliable.

Table 1
Reliability Statistics

Cronbach's Alpha	N of Items
.715	21

59.51% of the respondents are female and remaining 40.49% of respondents are male.
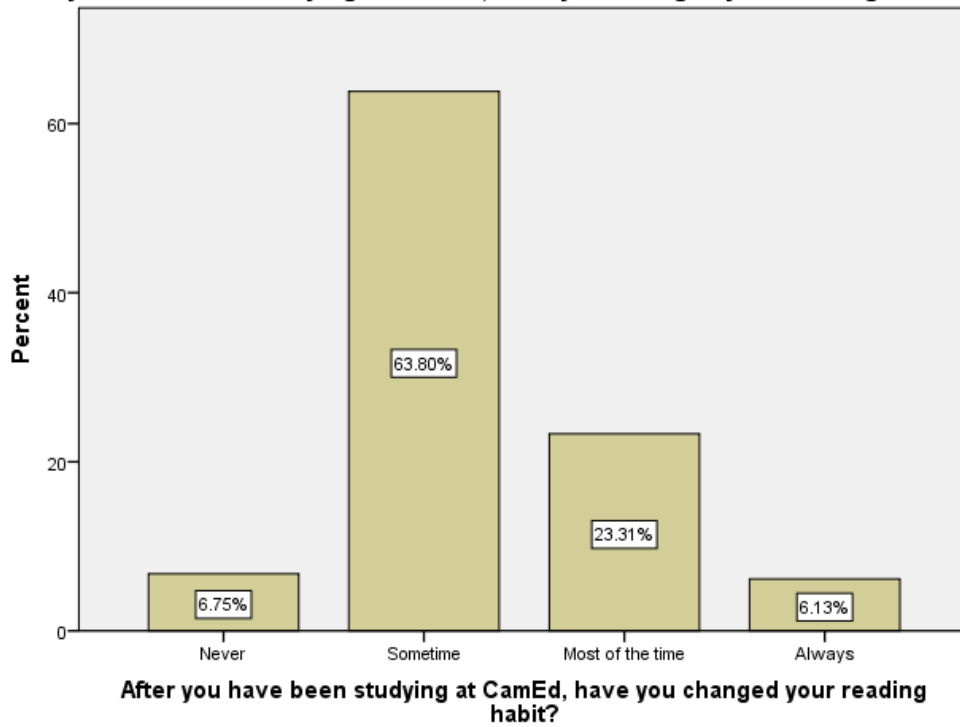
Figure 1
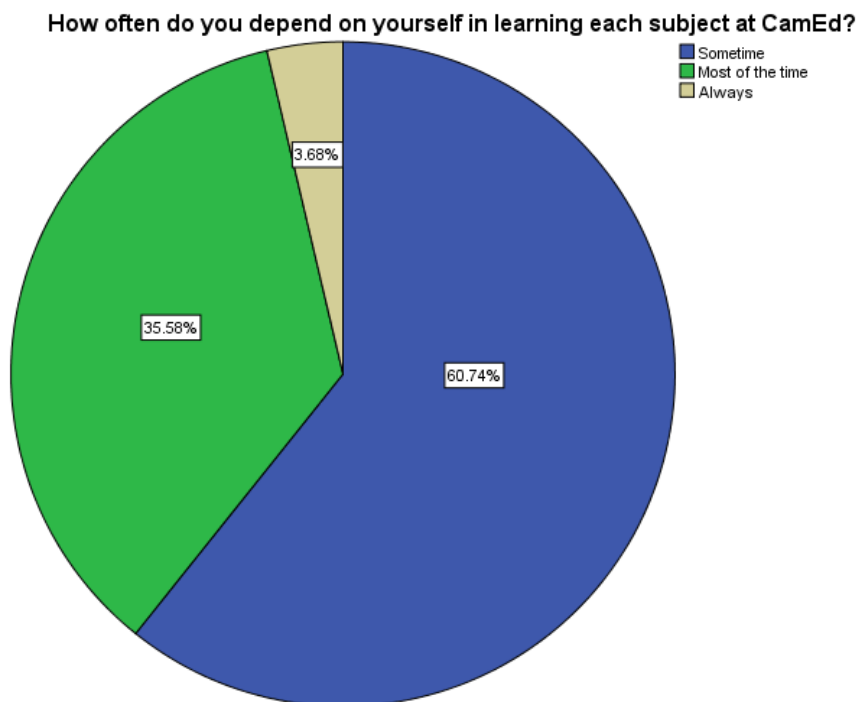
Only 3.68% of the respondents always depend on themselves in studying each subject at CamEd. 35.58% of the respondents said that they study each subject at CamEd by themselves most of the time, while 60.74% of respondents sometimes depend on themselves. In addition, less than one third of all respondents think they have reading habit. This might be the reason that majority of respondents do not depend on themselves in learning each subject.

Figure 2

Do you have a reading habit?

Yes
No

27.61%

72.39%
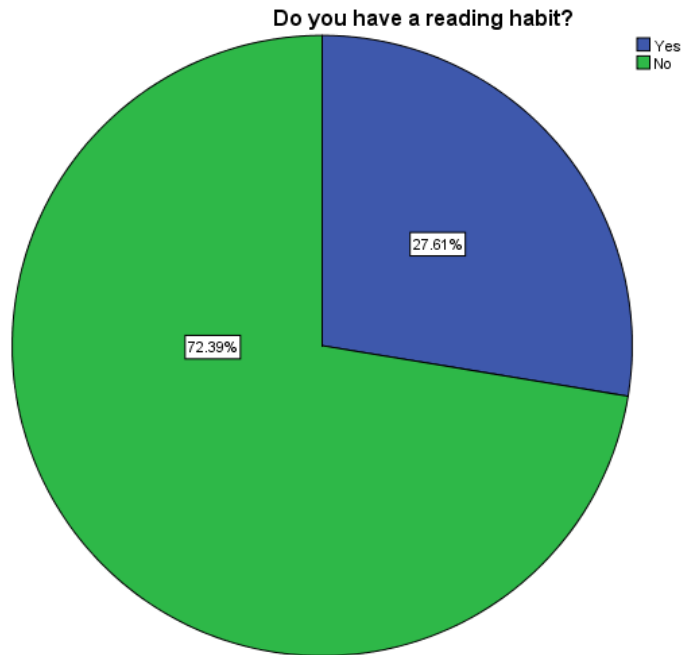
Figure 3

After you have been studying at CamEd, have you changed your reading habit?

63.80%

23.31%

6.75%

6.13%

Never | Sometime | Most of the time | Always

After you have been studying at CamEd, have you changed your reading habit?

After the respondents enrolled to study at CamEd business school, the behavior of them toward reading habit have changed as shown in Figure above (3), 63.80%, 23.31% and 6.13% of respondents said that their reading habit has changed for sometimes, most of the

time and always, respectively, whereas only 6.75% of respondents said that they have never changed their reading habit. Even though most of the respondents have changed their reading habit to different extent, a collection of 38.65% of respondents have spent more than two hours to read the book, and around 62% of respondents have spent only one hour or less in reading textbook.

Figure 4

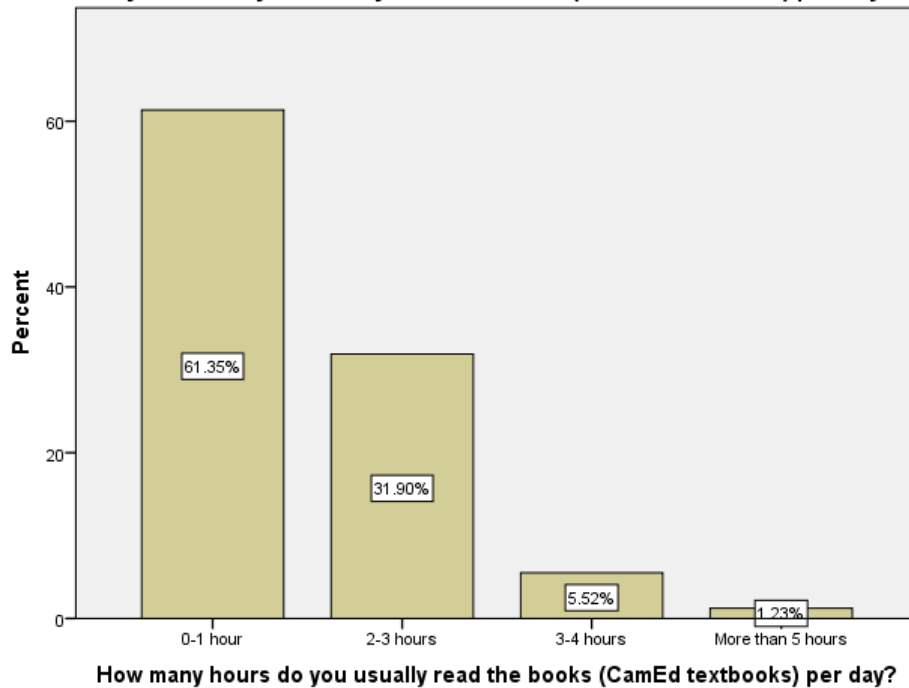**How many hours do you usually read the books (CamEd textbooks) per day?**

How many hours do you usually read the books (CamEd textbooks) per day?

Figure 5

How much do you like the Microeconomics subject?

CamEd
Business School

Figure 6

How much did you understand Microeconomics subject after finished this course in the previous term(s) at CamEd?
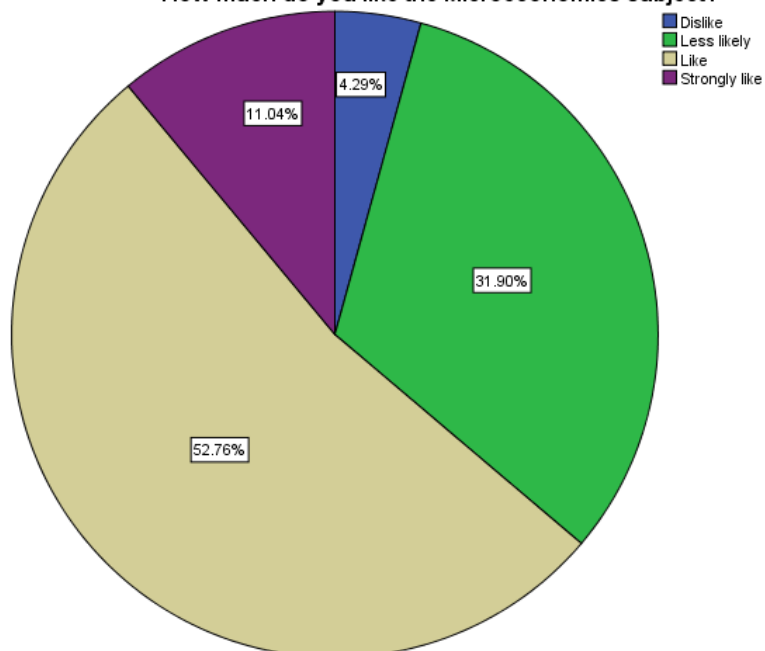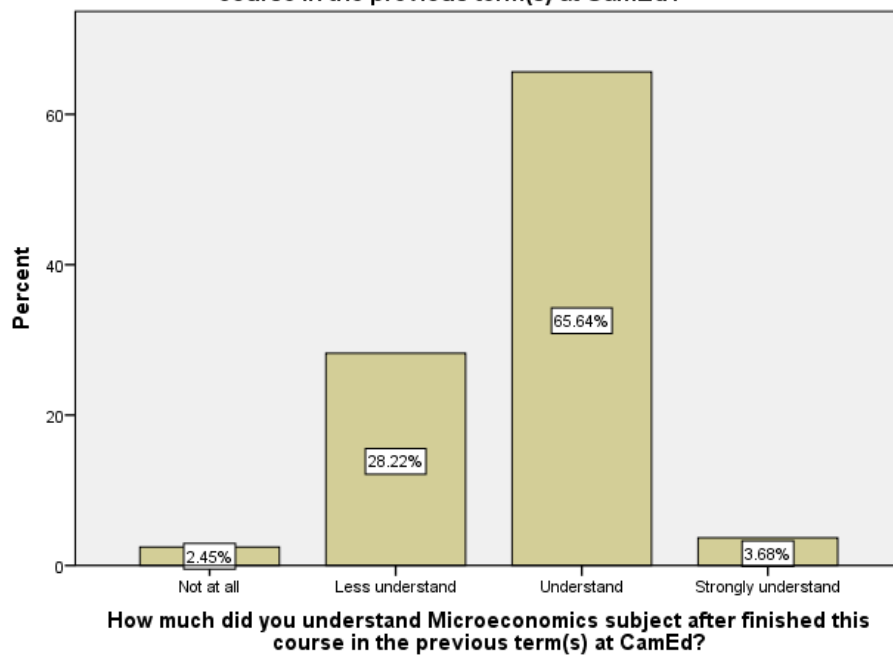

How much did you understand Microeconomics subject after finished this course in the previous term(s) at CamEd?

More than 50% of respondents like to study Microeconomics, while 65.64% of respondents understand this subject. Almost haft of respondents show that the current Microeconomics textbook is suitable with their level.

Figure 7

How well did you think that the Microeconomic textbook you had learned was suitable with your study level?
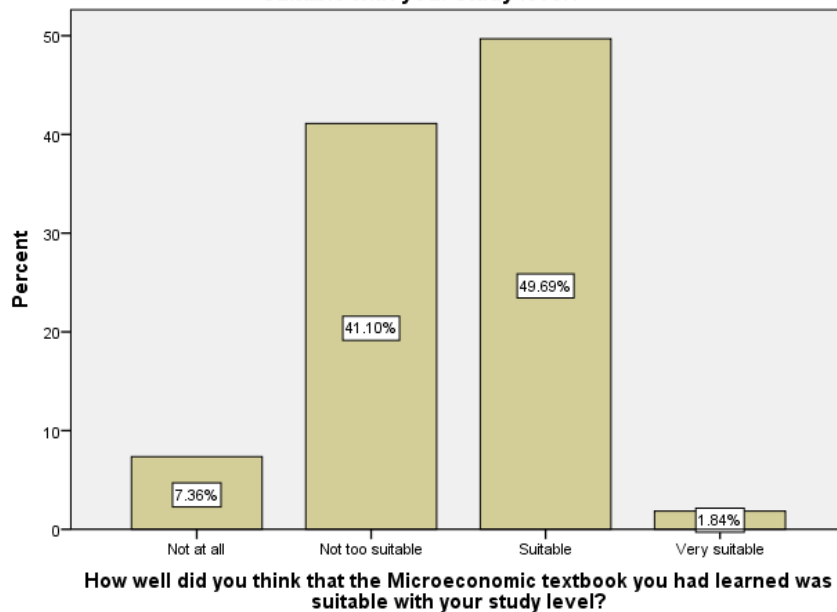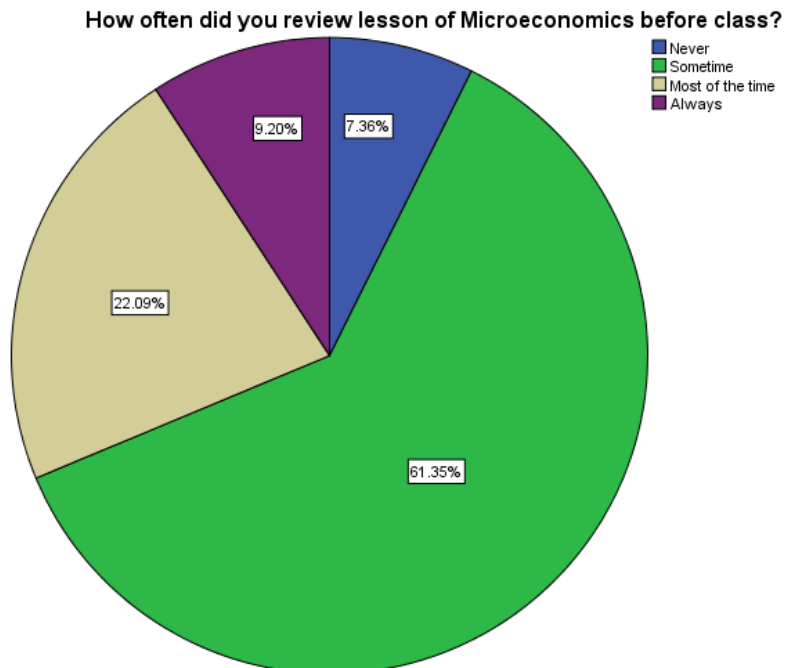

How well did you think that the Microeconomic textbook you had learned was suitable with your study level?

Figure 8

How often did you review lesson of Microeconomics before class?

22.09% of respondents have found to review their lesson most of the time before Microeconomics class and 9.2% of them always review their lesson before class. 61.35% and 7.36% of them sometime or never review lesson before class, respectively. After class, only 9.20% of respondents review the Microeconomics lesson again, while about 71% sometime do review after class.
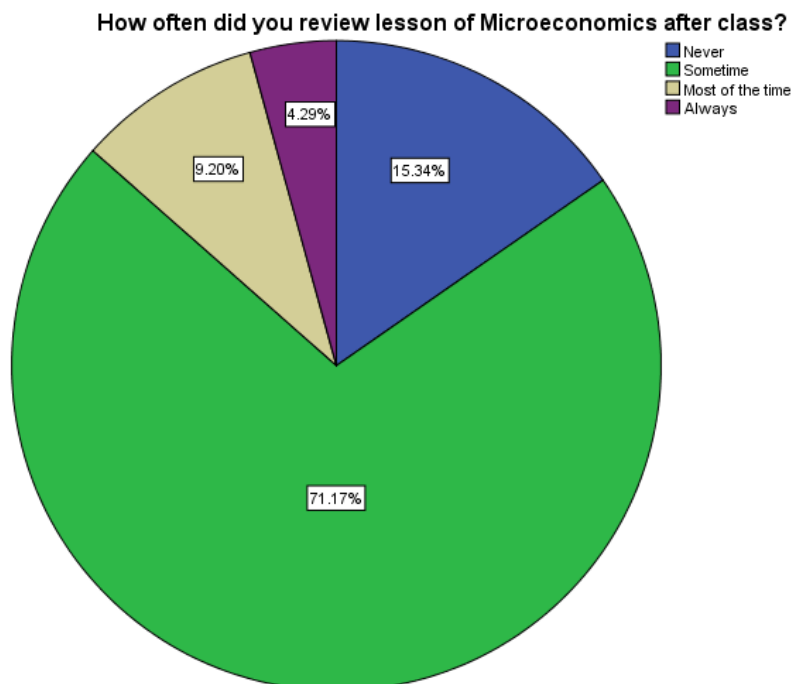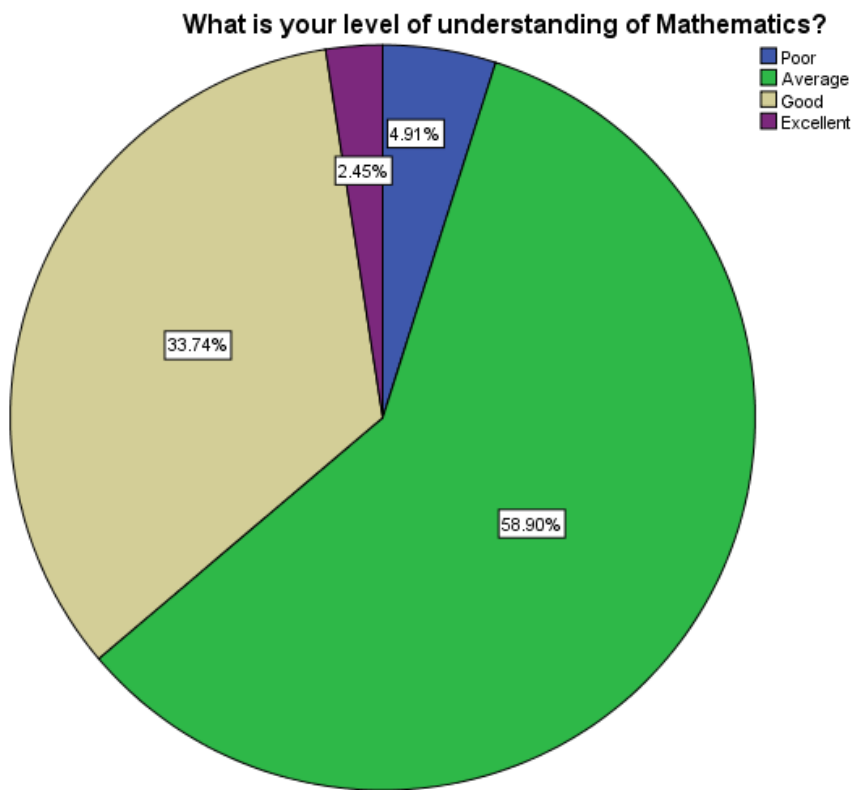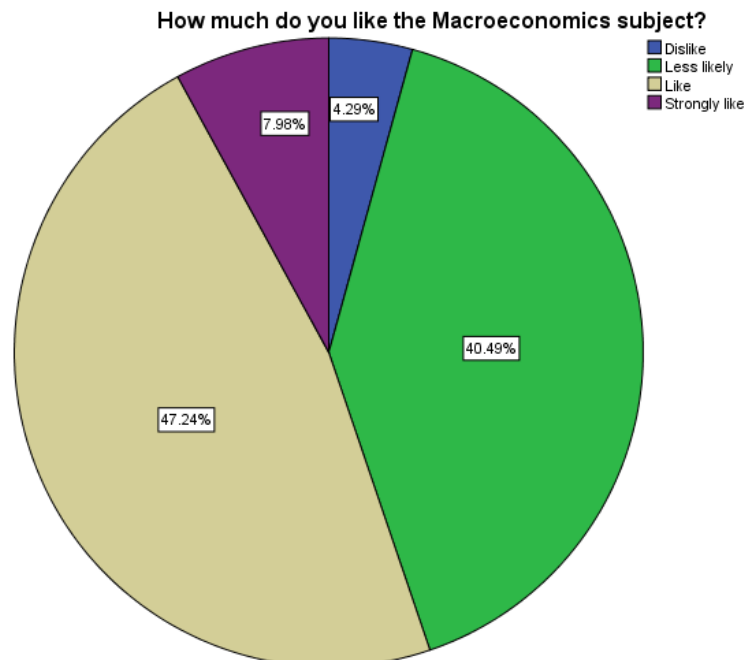
Figure 9

How often did you review lesson of Microeconomics after class?

Figure 10

What is your level of understanding of Mathematics?

Legend:
- Poor
- Average
- Good
- Excellent

4.91%

2.45%

33.74%

58.90%

Figure 11

How much do you like the Macroeconomics subject?

Legend:
- Dislike
- Less likely
- Like
- Strongly like

7.98%

4.29%

40.49%

47.24%

About 59% of respondents' levels of understanding of Mathematics are average and 47.24% of respondents do like Macroeconomics subject and 7.98% of them strongly like the course. 40.49% of them are less likely to love the course and 4.29% dislike the course.

Figure 12

What is your level of understanding of Macroeconomics subject which you are studying?

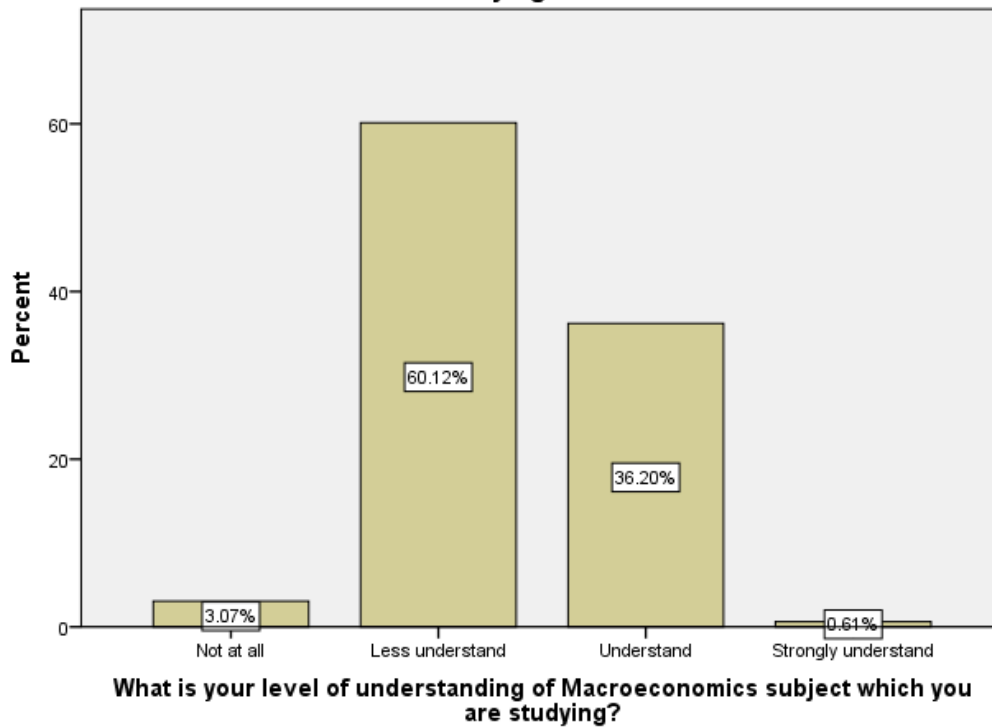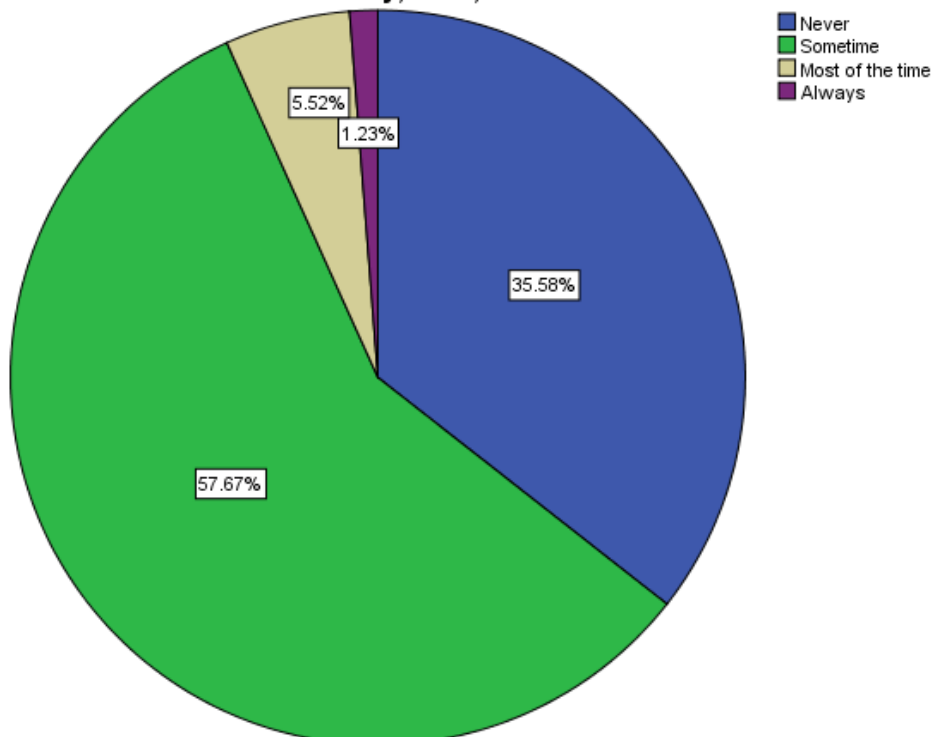What is your level of understanding of Macroeconomics subject which you are studying?

Figure 13

How often do you read the Macroeconomics textbook, which was written by Bernanke, Abel, and Croushore, Macroeconomics, seven edition, Addison-Wesley, 2011, before the class?

Totally, 35.58% of respondents have never read Macroeconomics textbook and 57.67% of them sometimes read the book. According to the survey, 36.2% of respondents think that they understand about the subject, whereas 60.12% think that they do not understand much about the course.

Figure 14

How difficult is the Macroeconomics textbook which was written by Bernanke, Abel, and Croushore, Macroeconomics, seven edition, Addison-Wesley, 2011, that you are studying?

Legend:
- Not at all
- Not too difficult
- Difficult
- Very difficult

1.84%
11.04%
31.29%
55.83%
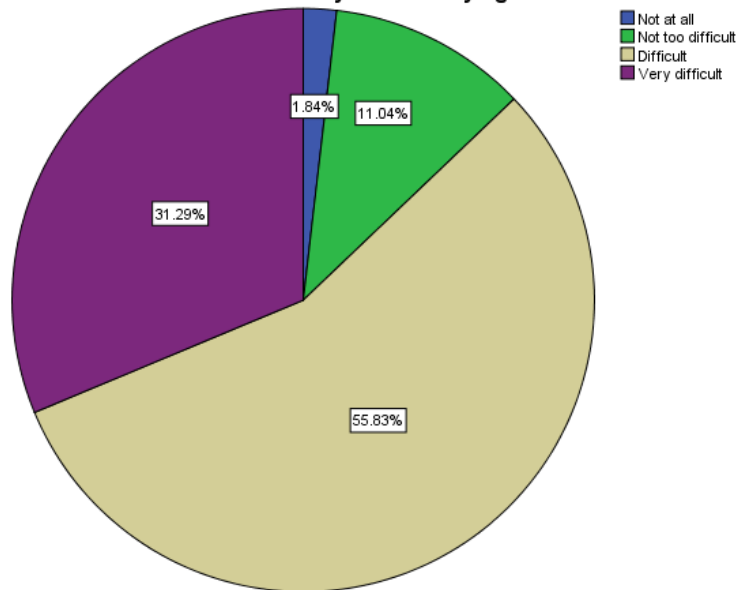
We have found that this might be the textbook used in this subject is difficult. Based on the survey, approximately 56% of respondents think that the Macroeconomics textbook used for this course is difficult. In addition, 31.29% responded that the book is very difficult.

Figure 15

On what level can the exercises at the end of each chapter of Macroeconomics be completed by yourself without any solution or help from your lecturer?

On what level can the exercises at the end of each chapter of Macroeconomics be completed by yourself without any solution or help from your lecturer?
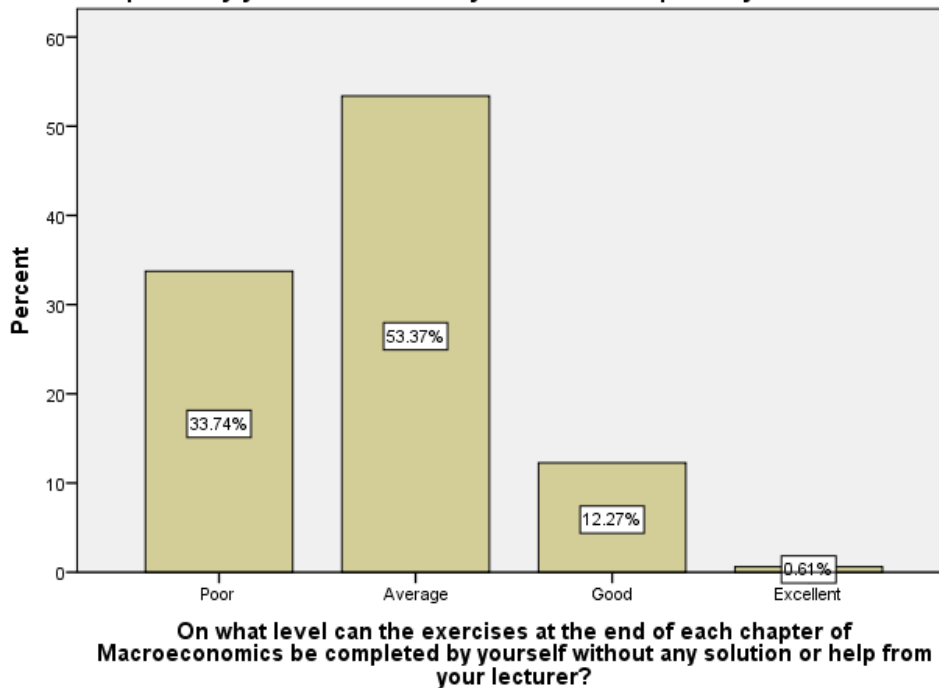
Without help from their lecturer, the 55.37% of respondents think they are average in completing the exercises in each chapter of macroeconomics, while 33.74% of them think that they are poor and cannot complete the exercises. Only a total of 13% of respondents think they can complete the exercises well without any help from their lecturers.

Figure 16

On what level do you think the level of difficulties of your Macroeconomics book matches your competency in studying that subject?

Regarding to the question related to the level of difficulty of the Macroeconomics textbook which is currently used by the students, the result from survey show that 64.42% of respondents find it "difficult" to match level of understanding.

Figure 17

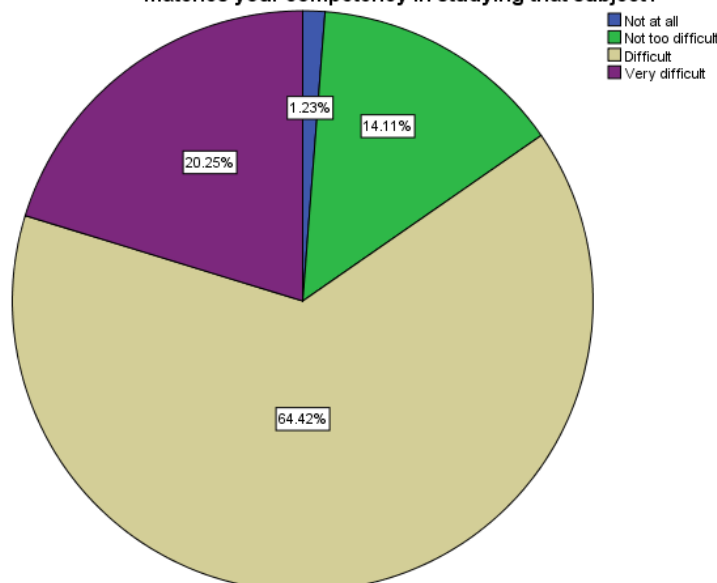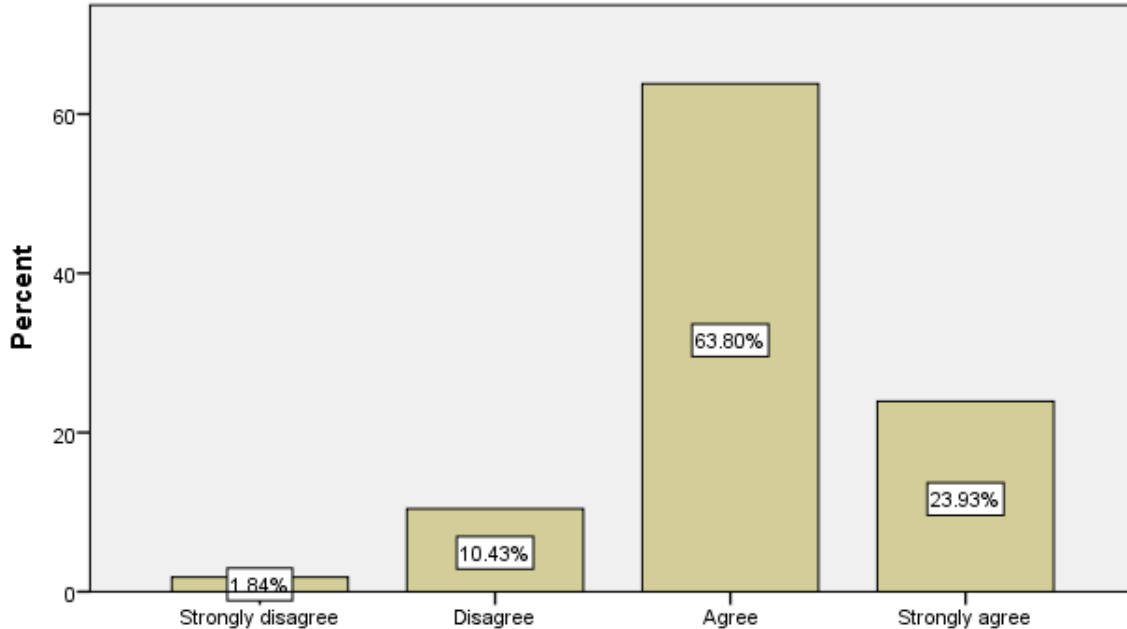**If the Macroeconomics textbook which was written by Bernanke, Abel, and Croushore, Macroeconomics, seven edition, Addison-Wesley, 2011 is changed to the Macroeconomics textbook which was written by Frank and Bernanke, Principles of Macroeconomics, fifth e**

If the Macroeconomics textbook which was written by Bernanke, Abel, and Croushore, Macroeconomics, seven edition, Addison-Wesley, 2011 is changed to the Macroeconomics textbook which was written by Frank and Bernanke, Principles of Macroeconomics, fifth e

Most of the respondents have agreed on the change of current Macroeconomics textbook to the Principle of Macroeconomics written by Frank and Bernanke. As shown in the above figure, a total of 88% of respondents either strongly agree or agree to change the course book. Only 1.84% and 10.43% strongly disagree and disagree, respectively, and want to keep the current course book. The result is much more clear as more than 47.24% of the students revealed that the mathematics have used in the macroeconomics textbook are intermediate and advance. This probably driven by the facts that approximately 47% and 15% of respondents find that mathematical levels of the current Macroeconomics course book is intermediate and advanced, respectively.

Figure 18

What is the level of mathematics have used in the Macroeconomics subject that you are studying?

What is the level of mathematics have used in the Macroeconomics subject that you are studying?
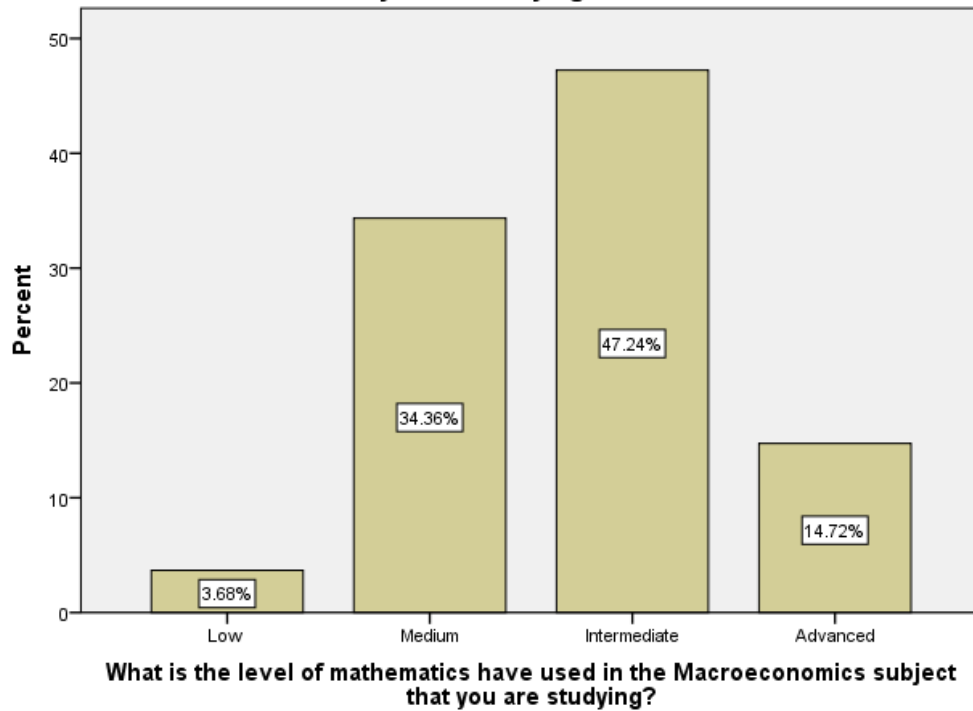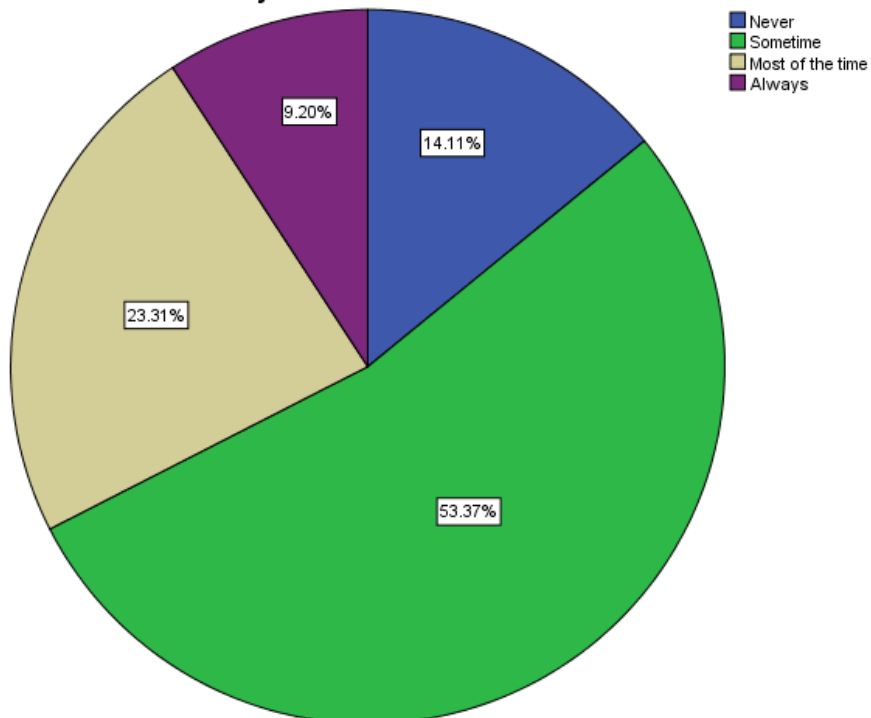
Figure 19

How often do you review lesson of Macroeconomics before class?

Before each session of the Macroeconomics class, 53.37% of the respondents sometimes review the lesson; 23.31% of them indicate that they most of the time review the lesson; 9.20% of them always review the lesson, while only 14.11% never review the lesson.

Figure 20

How often do you review lesson of Macroeconomics after class?
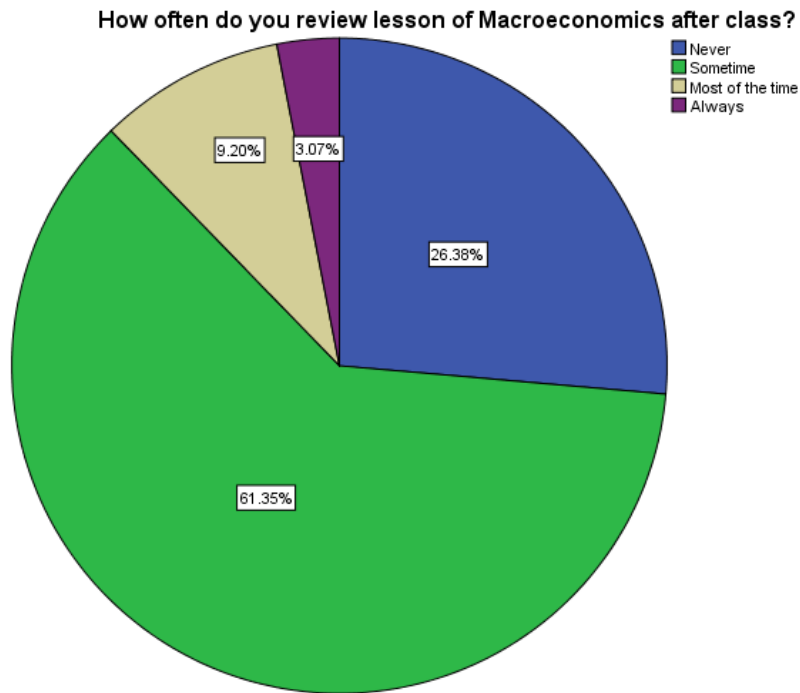
In addition, after each session of Macroeconomics class, 61.35% of the respondents review the lesson; 9.20% of them most of the time review, and 3.07% of them always review, but about 26% never review the lesson.

This part is the result related to the hypothesis testing using non-parametric test.

Table 2
Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.982[a]	9	.049
Likelihood Ratio	14.920	9	.093
Linear-by-Linear Association	.350	1	.554
N of Valid Cases	163		

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .04.

This research tries to find the relationship between the level of understanding of Macroeconomics subject and the level of Mathematics used in Macroeconomics subject. The calculated Pearson Chi-Square is 16.982 with the probability value of 0.049 (4.9%) which is lower than significant level of 5 percent. Thus, there is the correlation between the level of understanding of Macroeconomics subject and the level of Mathematics used in Macroeconomics subject in this study.

Table 3
Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.141[a]	9	.012
Likelihood Ratio	22.666	9	.007
Linear-by-Linear Association	8.999	1	.003
N of Valid Cases	163		

a. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .02.

The result of this study has also indicated the correlation between the difficulty of the Macroeconomics textbook which was written by Bernanke, Abel, and Croushore and the level of difficulties that the respondents find to complete the exercises at the end of each chapter of Macroeconomics themselves without any solution or help from your lecturer since the probability value of the Pearson Chi-Square is 0.012 (1.2%) which is lower than significant level of 5 percent.

Table 4
Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	24.891[a]	9	.003
Likelihood Ratio	25.296	9	.003
Linear-by-Linear Association	10.613	1	.001
N of Valid Cases	163		

a. 9 cells (56.3%) have expected count less than 5. The minimum expected count is .07.

In addition, this study investigates the relationship between the level of difficulties of your Macroeconomics book to match your competency and the level of mathematics used in the Macroeconomics subject. The null hypothesis is highly rejected with 1 percent significant level with probability of calculated Pearson Chi-Square value of 0.003.

Table 5
Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	43.952[a]	9	.000
Likelihood Ratio	24.804	9	.003
Linear-by-Linear Association	16.081	1	.000
N of Valid Cases	163		

a. 12 cells (75.0%) have expected count less than 5. The minimum expected count is .02.

The null hypothesis highlights that there is no relationship between the two mentioned variances because the probability of the calculated Pearson Chi-Square value is very low. As refer to Nominal Phi, the relationship is at 0.52.

4. Conclusion

The study has indicated that reading habit of the respondents have changed after studying at CamEd Business School, but the total hours of reading is rather low. Before each session of economics class, either Microeconomics or Macroeconomics, most of the respondents reviewed the lesson. This study has found that the Macroeconomics textbook which have used in Macroeconomics class is rather difficult in matching the competency of the respondents since the level of understanding in Mathematics of most of the respondents are average. The correlation of the two variances has shown clearly during the hypothesis testing on the relationship between the level of understanding of Macroeconomics subject and the level of Mathematics used in Macroeconomics subject

The correlation between "the level of difficulty of the Macroeconomics textbook which was written by Bernanke, Abel, and Croushore" "the level of difficulties that the respondents find in completing the exercises at the end of each chapter of Macroeconomics themselves without any solution or help from their lecturer" is also found in this research with less than 5 percent significant level. More interestingly, the relationship between "the level of difficulties of the Macroeconomics book to match the competency in studying that subject" and "the level of mathematics used in the Macroeconomics subject" is also found in this research with highly statistically significant. Last but not least, the relationship between the level of understanding of Mathematics of the respondents and the level of understanding of Macroeconomics subject is also found with 1 percent significant level.

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Appendix

Questionnaire

I am conducting a research for CamEd Business School relating to **"The Behavior of Students in the Economics Class at CamEd Business School"**. The result of this research would be beneficial for students in the next batch as they would prepare themselves well in the economics class at our school. To complete this research, this questionnaire is developed as you could see below. Please spare a few minutes of your time to fulfill this questionnaire.

1. Gender: ☐ Male ☐ Female

2. Which year are you studying at CamEd? ....

3. How often do you depend on yourself in learning each subject at CamEd?
   ☐ Never ☐ Sometime ☐ Most of the time ☐ Always

4. Do you have a reading habit?
   ☐ Yes ☐ No

5. After you have been studying at CamEd, have you changed your reading habit?
   ☐ Never ☐ Sometime ☐ Most of the time ☐ Always

6. How many hours do you usually read the books (CamEd textbooks) per day?
   ☐ 0-1 hour ☐ 2-3 hours ☐ 3-4 hours ☐ More than 5 hours

7. How much do you like the Microeconomics subject?
   ☐ Dislike ☐ Less likely ☐ Like ☐ Strongly like

8. How much did you understand Microeconomics subject after finished this course in the previous term(s) at CamEd?
   ☐ Not at all ☐ Less understand ☐ Understand ☐ Strongly understand

9. How difficult was the Microeconomics textbook, which was written by Frank, Robert, Ben Bernanke, and Hon-Kwong Lui. *Principles of Economics*, Asia Global Edition. McGraw-Hill, 2015, which you had learnt in the previous term(s) at CamEd?
   ☐ Not at all ☐ Not too difficult ☐ Difficult ☐ Very difficult

10. How well did you think that the Microeconomic textbook you had learned was suitable with your study level?
    ☐ Not at all ☐ Not too suitable ☐ Suitable ☐ Very suitable

11. How often did you review lesson of Microeconomics before class?
    ☐ Never ☐ Sometime ☐ Most of the time ☐ Always

12. How often did you review lesson of Microeconomics after class?
☐ Never   ☐ Sometime   ☐ Most of the time   ☐ Always

13. What is your level of understanding of Mathematics?
☐ Poor   ☐ Average   ☐ Good   ☐ Excellent

14. How much do you like the Macroeconomics subject?
☐ Dislike   ☐ Less likely   ☐ Like   ☐ Strongly like

15. What is your level of understanding of Macroeconomics subject which you are studying?
☐ Not at all   ☐ Less understand   ☐ Understand   ☐Strongly
understand

16. How often do you read the Macroeconomics textbook, which was written by Bernanke, Abel, and Croushore, *Macroeconomics*, seven edition, Addison-Wesley, 2011, before the class?
☐ Never   ☐ Sometime   ☐ Most of the time   ☐ Always

17. How difficult is the Macroeconomics textbook which was written by Bernanke, Abel, and Croushore, *Macroeconomics*, seven edition, Addison-Wesley, 2011, that you are studying?
☐ Not at all   ☐ Not too difficult ☐ Difficult   ☐ Very difficult

18. On what level can the exercises at the end of each chapter of Macroeconomics be completed by yourself without any solution or help from your lecturer?
☐ Poor   ☐ Average   ☐ Good   ☐ Excellence

19. On what level do you think the level of difficulties of your Macroeconomics book matches your competency in studying that subject?
☐ Not at all   ☐ Not too difficult ☐ Difficult   ☐ Very difficult

20. If the Macroeconomics textbook which was written by Bernanke, Abel, and Croushore, *Macroeconomics*, seven edition, Addison-Wesley, 2011 is changed to the Macroeconomics textbook which was written by Frank and Bernanke, *Principles of Macroeconomics*, fifth edition, McGraw-Hill, 2013, which has lower level as compare to the current textbook, how strongly would you agree?
☐ Strongly Disagree ☐ Disagree   ☐ Agree   ☐ Strongly agree

21. What is the level of mathematics have used in the Macroeconomics subject that you are studying?
☐ Low   ☐ Medium   ☐ Intermediate   ☐ Advanced

22. How often do you review lesson of Macroeconomics before class?
☐ Never   ☐ Sometime   ☐ Most of the time   ☐ Always

23. How often do you review lesson of Macroeconomics after class?
☐ Never   ☐ Sometime   ☐ Most of the time   ☐ Always

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